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THE SCHOLAR'S POINT OF VIEW.

It is a well-known tenet of moral philosophy, that any act can be fairly estimated only in natural connection with The deed is simply that point where the surface its motive. of life is touched by some of the numberless emotions and impulses playing beneath, and, so far as it is superficial, must be without merit or blame. When we pierce the appearance, in search of the hidden power, we reach the nature of every action. The generosity of the philanthropist, and the shrewd foresight of the egotist, may assume the same noble guise, while a closer observation detects in one instance a divine liberality, in the other, a pitiable meanness. Motives, moreover, are not always within the province of our immediate judgment. By a paradox we reckon the deed by the purpose, and purposes are revealed to us by the prevailing qualities of deeds in which they take definite form. Only by a constant study of the character of the subject can we attain a just measure of individual character. Without this we expose ourselves to the perpetual deceit of circumstance and temptation, thoughtlessness and irresolution, doubt, misconception, and the infinite frailties to which our poor humanity is a prisoner. By enlargement, not contraction, - by comprehension, not isolation, can we establish the true standard of life's varying performance.

These principles, so universally recognized, if not employed, in ordinary intercourse, it would be impertinent to strive to enforce at present. In one department of business. however, and that neither narrow nor trivial, they are so completely ignored that we wish to say a few words in regard to their application to school-keeping. Surely here, if anywhere, we are to regulate ourselves in accordance with intellectual and ethical philosophy. We deal with the mind in its most plastic and susceptive state. Under the exaggerated statements of enthusiastic and self-complacent harangues, the truth still lurks that the teacher wields a power of impression and permanent influence beyond his foresight or computation. Childhood, with all its quick perception and willing receptiveness, its pliancy, docility, and faith, is in his control to an extent compassed only by the parental. The soil, fresh, warm, and mellow, awaits his planting, and the seed he scatters, be it good or pernicious, must sometime and somewhere bring its appointed harvest. The process of germination and growth will be in conformity with the inviolable laws of nature; so, in order to success and blessing, must be his labor. Instruction and discipline must be harmonized with the child's character, not arrayed against it; education, not subversion, is our business; leading, not driving, exaltation and purification, not constraint, or repulsion, or destruction, the work whereto we are called.

We believe, then, tuition and government can be perfect only when instituted and sustained from the point of view of the scholar as well as of the teacher. That this is in accordance with the philosophy of the mind, we need not argue. We hold it to be confirmed also by the experience and testimony of every watchful instructor. It is not only right, but essentially expedient to make it the rule of our practice. If the unwelcome duty of correction has fallen to us, we find it an unprofitable, even a fruitless task, to bring an offender to such repentance as works enduring reformation, until he is made to feel our appreciation of the impulses which urged him to the transgression. No

grasp can be gained upon a boy's heart until he knows it lies open to the inspection of him who seeks to control him. So long as he hugs away a secret feeling of ambition or honor, false though it be, he will entrench himself behind it, and if he yield to threats, will defy persuasion. But the moment he sees his most intimate motive discovered, and all his privacy invaded, then his last stronghold is destroyed; then he will commit himself to the superior spirit; then, regarding his action from the light that has lifted itself above his own, he will bend to the dominion of a temper, clearer, surer, stronger than his truant recklessness. Logic is of little use when an opponent is fixed in his conviction of our ignorance of the full bearing of the question at issue. Children are good logicians. The error of their conclusion comes from falseness of premise tenfold oftener than from incompleteness of process. So we must show them the insecurity of their starting-point before we blame them for the treacherous position finally reached.

Every teacher, therefore, should thoughtfully and patiently study human nature, especially as it displays itself fresh and free in youth. The inmost springs and movements of the unspoiled heart, its enthusiasm, its improvidence, its delicacy, its generosity, its outgushing confidence and affectionate faith, should all be reverently explored and tenderly managed. We put no trust in Procrustean systems. Government, training, instruction must be personal to have the smallest value. No code of laws, sanctioned by unvarying penalties, can be devised elastic enough to fit all occasions and emergencies. Two hundred years ago, worthy old Thomas Fuller said of The Good Schoolmaster, "He studieth his scholars' natures as carefully as they their books, and ranks their dispositions into several forms." It is getting to be reckoned high praise to be called a good disciplinarian, and some almost consider it a fair offset to say, "He is not much of a teacher, but a good disciplinarian." As if he could be a just and true disciplinarian who is not an affluent and communicative teacher! He may indeed maintain in his school a semblance of order, but it is the torpid somnolence of stolidity. Government and instruction should be harmonious in their character and application, otherwise one portion of the pupil's faculties is developed at the cost of another, and so the whole constitution becomes defective and diseased. Our whole theory is grounded upon the idea that education should be conducted for the broadening and deepening of mental power, not at its expense and torture. This does not imply lawless indulgence. In pruning a tree, while here we lop off an unseemly branch, there an exhausting shoot, we are careful to spoil no channel by which the sweet influences of the atmosphere or tougher virtues of the soil may penetrate by lively juices the fair, luxuriant growth.

Much of our school-keeping is lamentably deficient in the sympathetic element. Scholars are too apt to feel two sets of interests in the school, and to persuade themselves of a consequent, inevitable antagonism. They do not admit the possibility of complete concord of purpose and action, of desire and effort and achievement and reward, between themselves and him who is by the terms of his office their master. Now no thoroughly successful work can be accomplished till this illusion is dispelled. The heart of the learner must go along with his intellect. Recitations may be brilliant, and result even in acute scholarship, without this good-will, but beneath the splendid surface will be dangerous hollowness. The recognition and culture of the buoyant childish disposition, to which we have cursorily alluded, will necessarily result in this sympathy. No man who does not degrade himself by forgetting his own early life can fail to admire and envy the cordial, bluff, athletic vitality of boys about him. Dreary and desolate must the pathway of life be to him who amid its gathering dust and heat will not uncover his brow to the gales of the happier dawn. Heavy must be the eye that will never give one longing gaze to the retreating vision, and cold the heart of him who will never turn

> "To pluck a flower from childhood's clime, And listen at life's noonday chime For the sweet bells of morning."

By the conditions of our relation to our pupils, there can be

but a slight bond of intellectual sympathy between us, and they expect as little. They anticipate, and are disgusted if they do not find, in this direction, a manifest superiority. Yet here we do well always to remember how similar perplexities beset us and similar hardships appalled, for so we may render them encouragement vastly more precious than positive assistance. Here lies the secret of the superiority of females as It would be a want not only of gallantry (which is a sad offence), but of justice (which is sadder), to deny that, in similar circumstances, a woman excels the sterner sex in quickening and developing the mind of a child. Sometimes her own information may be limited or erroneous: but she has the faculty of getting close to the tender nature of her charge, alluring it to her in implicit trustfulness, and conducting it into paths straighter and surer than she herself has followed. So we have heard the story of a mother, who, in terms scientifically inaccurate, gave her little one a definite idea of celestial phenomena; while an astronomer, by refined and irreproachable technicalities, merely confounded its previous ignorance. As we have already said, the throbbing response of heart to heart is no small stimulant to intellectual activity. The mind toils cheerfully and long that knows its labors are rightly viewed. and, strengthened by this subtile, indefinable magnetism, it will cherish a loftier and prouder consciousness of its independent power. Who has not visited a primary school where some softvoiced, patient girl lulled her restless flock to a contented quiet until their studious enthusiasm became worthy the emulation of scholars of larger capacity and acquisition? This is no matter for easy acknowledgment and easier forgetfulness. Some hidden philosophy is there, which we do wrong to overlook. We believe the perfect management of a primary school to be the chief attainment of school-keeping; and we believe the poorly-paid, successful, happy primary teacher to be the model we shall more wisely imitate than despise. We confess our inability to detect the covert charm, unless it be in this sympathy for which we are pleading.

One of the signal trials of our profession springs from the propensity of scholars, as such, to disregard the principles of

their ordinary conduct. They will separate the hours of school from real life. A boy, who on the play-ground scorns a falsehood or a trick, will remorselessly cheat his teacher at all points, and find, in the one case, countenance and assistance from comrades who, in the other, would drive him with contempt from their society. A girl, who takes pride in being ladylike and gentle, is at school coarse and treacherous, and is applauded for her audacity by those who are more quiet simply because more cowardly. We have all seen pupils overwhelmed with shame and contrition when brought to consider some fault in the light of accustomed politeness and honor. Impropriety, carelessness, disobedience, are too often as reckoned matters of course, and maturer years are complacently looked forward to as the season of half-congratulatory, half-regretful retrospection. Sowing wild oats in the time of pupilage has come to be almost the sure pledge of abundant harvest of golden grain. Parents, and sometimes teachers themselves, foster this disastrous folly by winking at cunning tricks and smooth peccadilloes which might elsewhere be stigmatized as tokens of incipient rascality. This is miserably wrong. The career at school is an essential constituent of the forming character; a vital part of the whole growth, not an offshoot by and by easily to be severed. All the invigorating currents of life are to be poured through it till it be hardened and rounded into the inmost substance of existence. It is the teacher's peculiar and sovereign province to inculcate this doctrine upon his pupils; not so much by elaborate speech and injunction, as by the more potent sway of a well-ordered conversation, a careful culture, a symmetrical character. By temper, by manners, by personal bearing; by genial companionship, by unruffled affability, by frankness which irresistibly provokes reciprocation; by faithful labor, by earnest sincerity, by wellmingled gravity and humor; by courteous phrase, even by neat apparel, he is to offer them a safe and acceptable example.

Are we not here too often guilty of culpable negligence? Many a man, who in the parlor would be only elegant and attractive, at his desk is a sloven and a clown. Many a woman, whose lips elsewhere fastidiously avoid coarseness, perhaps

even good, honest, outspoken bluntness, is in the midst of her pupils, harsh, petulant, sarcastic, repulsive. Dominie Sampson and Ichabod Crane are ludicrous caricatures; but no travesty ever found permanent place in a national literature save as it concealed beneath its grotesque garments the body of truth. "You don't look like a schoolmaster," is a remark some younger pedagogues cannot help receiving as a compliment. One of our newspapers said recently, "The schoolmaster is a sallow, dyspeptic individual, without a thimbleful of animal spirits." This is somewhat exaggerated, but there is too much truth about it for the comfort of our self-complacency. Surely all this is the poorest way to acquire the influence we seek over the mind and conduct of youth. Icicles and fossils are miracles just as much as any blossom, and leaf that woos the breeze or sleeps in summer-shine, but they hold different rank in the order of vitality and reproduction. Iron is excellent in the blood, but we object to having it cast for the countenance or the disposition. The teacher should neither be ridiculous for his levity, nor repellent by his grim precision; but, if we must choose between evils, let us have the error of good-nature. There is, however, a dignity without asperity, as well as a buoyancy without frivolity; an indulgence without laxity, as well as a firmness without severity; a manliness without asceticism, as well as a childlike tenderness without folly; a conscientiousness without bigotry, as well as a humanity without corruption; and to these a consummate teacher will aspire. Then his school-room will be no dungeon, but a chamber of God's fair and open mansion where the sun may beam and all the blessed gales of heaven may blow. The monastic cell, the solitary grove, the cynic's tub are gone, and we demand now only a sheltered corner, somewhat removed indeed from the struggle and peril of life's battle-field, but not from sight or hearing of the conflict, all must sometime enter. Our scholars ask for the sympathetic, not the tyrannic régime, and in proportion as they get it in all things, tuition, discipline, social communion, will grow stronger, wiser, purer, nobler.

We have prolonged these desultory remarks far beyond our intention. Our elder coadjutors may shake their wise heads

over them as trivial and fruitless, but our estimate of the subject, despite our imperfect treatment, can hardly be altered. Our impression of its moment has been deepened by the recent perusal of that lively book, Tom Brown at Rugby. Unless we misapprehend the lesson of such a story, the talisman of Dr. Arnold's supreme success lay in this manly sympathy which, like an electric chain, bound scholars and teacher in one grand circle of zealous, faithful, affectionate coöperation. We venture to transcribe a page taken almost at random from many similar passages:—

"But what was it, after all, which seized and held these three hundred boys, dragging them out of themselves, willing or unwilling, for twenty minutes on Sunday afternoons? True, there always were boys scattered up and down the school, who in heart and head were worthy to hear and able to carry away the deepest and wisest words then spoken. But these were a minority, always, generally a very small one, often so small a one as to be countable on the fingers of your hand. What was it that moved and held us, the rest of the three hundred reckless, childish boys, who feared the doctor with all our hearts, and very little besides in heaven or earth; who thought more of our sets in the school than of the church of Christ, and put the traditions of Rugby and the public opinion of boys in our daily life above the laws of God? We could n't enter into half that we heard, we had n't the knowledge of our own hearts or the knowledge of one another, and little enough of the faith, hope, and love needed to that end. But we listened, as all boys in their better moods will listen (ay, and man too, for the matter of that) to a man whom we felt to be, with all his heart and soul and strength, striving against whatever was mean and unmanly and unrighteous in our little world. It was not the cold clear voice of one giving advice and warning from serene heights to those who were struggling and sinning below, but the warm, living voice of one who was fighting for us and by our sides, and calling on us to help him and ourselves and one another. And so, wearily and little by little, but surely and steadily on the whole, was brought home to the young boy, for the first time, the meaning of his life; that it was no fool's or sluggard's paradise into which he had wandered by chance, but a battle-field ordained from of old, where there are no spectators, but the youngest must take his side, and the stakes are life and death. And he who roused this consciousness in them showed them, at the same time, by every word he spoke in the pulpit, and by his whole daily life, how that battle was to be fought, and stood there before them, their fellow-soldier and the captain of their bands. The true sort of a captain toc for a boys' army, one who had no misgivings and gave no uncertain word of command, and let who would yield or make truce, would fight the fight out, (so every boy felt) to the last gasp and the last drop of his blood. Other sides of his character might take hold of and influence boys here and there, but it was this thoroughness and undaunted courage which more than anything else won his way to the hearts of the great mass of those on whom he left his mark, and made them believe first in him, and then in his Master."

To such a course we challenge all laborers in our limitless field. Let us imitate this noble teacher who avoided no toilsome acquisition from which to impart to those under his instuction, who overlooked no exquisite refinement whereby he might touch and win youthful susceptibility. Let us do better. Even as he, the great, the wise, the good Arnold did, let us, in meekness, in gentleness, in love, reverently follow the Master. Children found their softest repose upon his bosom, their tenderest home within his arms. His precepts were based upon the childlike nature, and we obey only so far as we "become as a little child." No forbidding harshness, no chilling severity marred his compassionate utterance; the lips that scathed with awful sarcasm pharisaical righteousness, had for the young the boon of heavenly benediction. He led the lambs of the flock by pleasant ways, while he chased with the whip of cords the hardened and miserly worldling. Let us remember how the divine sovereignty, encompassing us all by its infinite dominion, still with ineffable benignity, with sweet, mysterious mercy, condescends to be "touched with a feeling of our infirmities." S. J. P.

THE TRUE COMPANION.

GIVE me the man, however old and staid,
Or worn with sorrow and perplexity,
Who, when he walks in sunshine or in shade,
By woodland bowers or bare beach of the sea,
O'er hill-top, or in valleys green with me,
Throws off his age and gambols like a child,
And finds a boyish pleasure in the wild,
Rejuvenescent on the flowery lea:
Him shall the years press lightly as he goes;
The kindly wisdom gathered in the fields
Shall be his antidote to worldly woes;
And the o'erflowing joy that Nature yields
To her true lovers, shall his heart enclose,
And blunt the shafts of care like iron shields.

STUDY OF OUR POLITICAL INSTITUTIONS.

[The following Essay was written twenty-five years ago, but the lapse of time has taken nothing from its power, and, we fear, very little from its pertinence. The careless and incomplete manner in which our national history is still studied in our schools, gives occasion for cordial reget. There seems to be a promise of more attention to this branch of education, and we kope to see it extended to our polity, of which most of our youth do not know even the most salient points. The Essay derives additional value from the character of its author, Hon. Theodore Frelinghuysen.—Spec. Ed.]

The United States are engaged in a political experiment that is the most eventful in the history of human society. Their career commenced and had been urged forward under the impulse of free opinions, uncontrolled by any power but the influence of public sentiment.

It was not the imposition of an odious tax alone that roused up the spirit of the American Revolution; its causes lay deeper, and sprung from a desire of self-government, naturally awakened in our forefathers by the distant location of the colonies, and collisions with the pretensions of arbitrary power.

Such manly spirits as encountered the perils and hardships of colonizing this New World, were not the materials of which to form systems of oppression. The freedom of the mind first led them to these forbidding and inhospitable shores. They dreaded less the haunts of savage men, than the despotism which invaded the rights of conscience.

The founders of a great Republic that was to become the abode of freemen and the asylum of the oppressed, could not have been better disciplined for such eminent service, than were the early fathers of our country. They were learners in a stern and vigorous school, that brought into action the firmest principles of our nature. Personal fortitude, the love of country, the value of well-regulated liberty, and the just rights of every member, were doctrines and virtues that here sprung up in a congenial soil. In no one branch of our political history is the benignity of Providence more illustrious, than in the propitious circumstances under which the foundations of American liberty were laid. The noble construction seemed to need just such men, and that they should be animated and sustained by just such sentiments. And who can repress the emotions of gratitude to the blessed Giver of every good, as he surveys the systems of government that in so short a period have grown up to dimensions broad as the wants and claims of the whole range of social existence?

To the study of political institutions established under these auspices, the youth of the United States are invited. The science of all government, and of ours especially, spreads over a great surface. It extends to the entire history of our manners, modes of thinking, dispositions, and pursuits. All these help to give consistence and character to the forms of political society. Therefore, fully to understand them, we must trace up our institutions to their sources, — we must turn to every portion of our history, which has shed any influence over the character of our communities.

And here opens a wide field for the ever wakeful curiosity of our youth; here is food for the strongest intellect, and a scope for investigation, which will employ and expand its most noble powers. For however we may reason with metaphysical abstractions, with us it is a practical truth that our government was not of arbitrary adoption, but the natural and necessary result of principles long and deeply cherished.

To introduce into our high schools, academies, and colleges. the study of our civil institutions, will engage our youth in the study of man under the most happy circumstances; and for a period the most eventful which has ever revolved. last hundred years will stand out throughout all the line of coming centuries, as a new era in the moral and political condition of mankind. They have witnessed great revolutions in government, more eventful changes in the opinions of men, than find a parallel in all past time. Not only have the rights of men been vindicated, and the rod of the oppressor broken, but the mind has been delivered from bondage. soul has indeed "gone abroad in her majesty," asserted her claims, and thrown off an ignominous subjection, to a degree never before so glorious. She has set out from a new starting-point, and for a higher and nobler goal. All this and more has the last century developed. All this and more will become the delightful theme for the student who would acquire just notions of the nature and spirit of our republican institutions. It is not, then, mere politics, but philosophy, in her broadest relations and aspects, that invites his researches. No pursuit of literature could be more favorable to the cultivation of the manly virtues. It exhibits many practical and illustrious commentaries that will powerfully persuade our youth into the paths of true honor, awaken in them the noblest sentiments, and qualify them for the high duties of maintaining and defending the great bulwarks of human freedom.

The importance of general education is now felt, by the American people, with something like adequate conviction. But there exists among us a reproach to our national taste, that should be promptly corrected. It is, shall I call it, the impatriotic vanity of preferring the history of all other countries, governments, and times to our own. With all our American boast and pretensions, it is still too true of us, that anything foreign, whether it be history, politics, or fashion, is

sure to supplant the home-born productions of taste and science. Where is the tyro who has not learned the story of Rome and Carthage, of Athens and Sparta? And yet very few have ever studied, with the seriousness and to the extent their importance demands, the histories of their own land. Most of them, we fear, know more, and are proud to know more, of Alexander and Leonidas, Cicero and the Cæsars, and generally of the illustrious men of Greece and Rome, than they do of the truly patrician names which so gloriously adorn the history of the American Republic. Let us hasten to eradicate these unworthy predilections; and if we do, indeed, love our country, let us love and cherish the names and the history which constitute so much of its glory.

But there are reasons of a more specific, and not less urgent character, which require the early instruction of our youth in the political institutions of the United States. We have adopted as a cardinal principle of our government, the doctrine, that all political power flows from the people; and that the only sovereignty known to American constitutions, abides with them; and that these constitutions are the modes by which the functions of government are exercised according to the will of the sovereign people. We should not think it wonderful that the politicians of the Old World disclaimed so loudly against our systems, when they perceived them to rest on foundations which to them must have seemed less stable than a wave of the sea. For they had never given the popular mind fair scope; they had mystified the science of government, treated the people as fit only to be ruled, and, of course, adapted their whole economy to such an estimate of their subjects. No marvel, then, that they should be startled at our political career, as bold as it was singular, which entrusted the people with the conservation of their own rights. And thus far they have shown themselves worthy of the high charge. The confidence reposed in them has been elevating in its influence; the people have felt the duty of self-government, and have risen up to the responsibilities of their condition. But let not our admiration at the triumphant vindication of free principles betray us into a misconception of the causes of our success. These, the student will find written as with a sunbeam on every page of our history. Whoever faithfully consults its records will not fail to be convinced that the intelligence and virtue of the American community imparted all that energy and wisdom to their political systems which have heretofore so happily sustained their claims to universal esteem and confidence. If the whole scheme of government - of the vigor and rectitude of its administration, - if the purity of its purposes and the faithfulness of their execution, depend on the popular will, then it is a corollary as certain as any mathematical deduction, that to attain or perpetuate such noble ends, this fountain and depository of political power must be pure and enlightened. The people must be taught to understand their rights, duties, and powers, as their forms of government develop and explain them, and by every effort of the most anxious patriotism, they must be imbued with the spirit of an elevated and pure morality. Which would be most needed in the preservation of our liberties - the virtue or intelligence of the community - might be made a matter of curious specu-For although in the just estimates of a rational and immortal being, virtue can suffer no disaster, for which its consolations would be an adequate support, yet as a merely political calculation, in view of the fair-seeming artifices of the demagogue, and the confiding proneness of simple-hearted honesty, it may be questioned whether the best state of morals could long sustain a system of free government among a people who were ignorant of its nature and principles.

Then, as we hear much of the rights of the people, let them be fully taught to understand and appreciate those rights. Let every school-boy, yea, school-girl too, be taught the great and yet simple principles of the federal constitution. Let them con over the stories of American liberty, in all its early struggles and later triumphs. Let them be pointed to the bright periods of the Revolution, and the young heart be warmed into enthusiasm as the constellation of its worthies rise to view. Let them study the fame of Washington, and learn wherefore its broad dimensions now fill both hemispheres. Thus initiated, let them study deeply and thorough-

ly the grave systems of civil polity which were formed by patriots of such training, and came up in the progress of such events, and we may hope to inspire our youth with the fervors of enlightened, and, I will add, American patriotism. For the untold value of the principle is treasured up in this. It is in the origin of our institutions; the place where and the time when the altar of liberty was erected and its fires lighted. It is because the temple was reared here, far from the corruptions of the Old World, that its pillars are so stable and firm.

If these hints have any measure of truth, then it is of the first importance, that the constitution and political history of the United States should be made subjects of instruction in our common and higher schools and colleges.

MY PICTURES ALL STICK TO THE CANVAS.

QUITE a number of years since, when we were principal of an Academy in the vicinity of the metropolis, a young man, of more genius than culture, without any formal introduction, called on us, and said he understood that we had several portraits in the house, and he should esteem it a great favor if he could be allowed to look at them, for he had rarely seen a portrait, with the exception of one or two he had attempted; "and," continued he, "I ever fail to make my pictures what I wish; they all stick to the canvas; they are as flat as the wall; and I cannot ascertain the cause of my failure."

"A brief study of the pictures before you," we remarked to him, "will doubtless show you where your trouble lies." "Have you studied," we asked, "the rules of perspective? do you understand the influence of light and shade to bring out the picture in proper relief?" "No, no, sir," said he. "I have seen no pictures, I have no books, I have had no instruction; and my poor attempts to paint have been, thus far, but mortifying failures. But the pictures before me are a lesson; they show me the cause of my want of success. I see now the power of dark paint. I shall do better for the future." He left us with a lighter heart and a brighter countenance.

We have not seen our young painter since that morning, which passed away years before some of the learned editors, whose names grace the cover of this valuable and interesting monthly, had taken their first lessons in their A B C. We know nothing of the subsequent history of the youthful artist, but we are confident, his pictures, from that morning, ceased to stick to the canvas.

We fear, Mr. Editor, very many of our young, ambitious teachers, yea, of older ones too, who are, we doubt not, influenced by laudable and earnest desires to do right and be successful in their vocation, are experiencing embarrassments similar to those which mortified our young friend; they fail, but can't ascertain the cause; they never succeed to do the thing they wish. Their pictures all stick to the canvas. Others, they are aware, by a skill unattained by them, round out the features and vitalize them almost to breathing and speaking. The truth is, too many of these teachers, very worthy men to be sure, have not taken their first lesson in the rules of perspective; they have no conception of the power of black paint to give to the picture life and breath and being; or, in other words, they have not learned the art of teaching; they are hearers of recitations - mere hearers. They do not know how to bring out the features of the lesson recited, so as to make it to the mind of the pupil, a tangible, living, speaking reality. Every thing in the recitation-room is dead, or what is equally uninviting - artificial, mechanical. The teacher, the book, the pupils and the blank walls, are all the same; there is no life, no soul in them. The trouble is, the teacher is not possessed of the indispensable, vitalizing energy. He may have spent his days in the acquisition of knowledge; he may, indeed, have attended for a term or two, or for as many years, it may be, a Normal School, the very culmination of preparation for successful school-teaching. And what if he has? Every Normal School may not be favored with a model teacher; and surely, there is nothing specially valuable in the mere name, in the discipline or course of studies in these schools. If a teacher of the right character is not there to guide, control, and inspire the whole, - if the model teacher is wanting, the whole concern is a blight and failure.

Your son may be apprenticed to the cabinet or shoemaker; he may be daily favored by his master, with oral instruction in abundance, upon the mechanic art he wishes to acquire, and this may be continued for months, yea, till the seven years of his appointed time shall have all transpired, and all to no avail.

The learner must see the thing taught, wrought out; so the lessons of the teacher, whether he be in the ordinary, less pretending school-room, or in that of the Normal School, must be exemplified, must be wrought out before the eyes of the learner. If he lectures to his pupils upon the desirableness of evenness of temper and entire self-control, he must show it in his every-day demeanor before his school; and more, he must state fully, explicitly and intelligently, how this Christlike temper is attained; if it is innate, how it can be improved; if it is not natural, let him inform his pupils how the old Adam can be exorcised, and the new enthroned. We speak as a teacher, not as a theologian. We knew a man once who was sorely tried by two or three dear boys, strongly inclined to the use of vulgar and profane language. anxious father expostulated, he threatened, he whipped, and, to seal his instructions effectually, he swore to them, if they did not desist, he would skin them alive. Could any one for a moment think that these evil-disposed boys, so blessed with precept and example, would ever curse and swear again ?-When the kind father was asked by his sarcastic neighbor, where his boys could learn such language: "I don't know," was his reply, "but I think it must be at that ---- town school."

As in the case of this miserable father of these less guilty sons, so with many an unfortunate teacher; he preaches to his pupils numerous homilies upon the loveliness of a quiet, amiable temper, one that never frets or is untowardly vexed, when he himself evinces to his school, every hour of the day, that the virtue he commends to others has no lodgment in his own breast—his teaching is vain.

Does the teacher of a higher or lower grade urge on those whom he teaches, the desirableness of punctuality in meeting

all their engagements — of marked neatness and system in every thing which pertains to them? does he commend gentleness of tone, and kindness and grace of carriage in their intercourse, one with another, every where, indeed, and at all times? — does he desire to see his pupils forbearing, forgiving, and ever solicitous to promote the comfort and well-being of all around them, in the circle of their influence? — if so, let him be, in his intercourse with them, and every where, and at all times, a living, walking example of the full and unmistakable possession and exemplification of all these traits of character. As the prophet of old, so let him act out what he prophesies. Is accuracy in recitation insisted on? The pupil must feel, because he cannot but see it, that his teacher is beyond and above mistake in the lessons he professes to understand and to teach.

Does the teacher, be he Normal or of lower pretension, press upon the learners the infinite importance of giving, as it were, vitality to the lessons heard? would he have them, when they, in their turn, shall have become teachers, be able to make the dumb page speak out, and not fail to arrest and fix the attention of the classes they instruct? Let the teacher, certainly if he is a Normal, show in his daily labors, the thing done, and teach his pupils the mystery of doing it. Is he hearing his class in English grammar? Let him so hear them, so talk to them on the subject, and so illustrate it in a familiar way, that, as they retire from the recitation, they shall say, "We have learned more by that half hour's plain, common-sense talk, than we had before by weeks of unsatisfactory application to the dead page of the grammar; before, all was dark and mysterious; now, all is light and intelligible." Let the scholars be deeply impressed with the truth, that it is one thing to hear recitations, and another to perform the duties of a teacher successfully. Let them, as they listen to their teacher pouring with a warm heart, from his well-stored mind, his rich instructions happily illustrated, learn the almost magic power of the human voice to impress on the learner the truths gathered from the well-studied page.

In a word, let the teacher be, before his classes, what he

urges them to be; let him be a model in the art he professes. For, theorize as one may, theory without art is comparatively worthless. In whatever station one may be placed as a teacher, but especially if he instruct in a Normal School, let him be thoroughly taught, well-disciplined in mind and heart, that he may be able to teach others thoroughly, and train them to completeness of character; let him, by precept and example, teach the art of teaching, and of moulding the morals to virtue and loveliness; let him be "kindly affectioned" towards his pupils, and they will be kindly affectioned towards him, and love to receive lessons of wisdom from his lips.

To drop the use of the third person, let us say to you, Teacher, govern yourself and your school; yourself first, then the other will be easy; let there be no needless show of authority, but be careful to have it, and of the parental type. And again, to use the words of the great and thoroughly taught model Teacher of the Gentiles, "If these things be in you and abound," we may confidently hope that, at no distant date, every where throughout our good commonwealth, teachers will be found as numerous as are the places in our schools for them to fill, leaving moreover a large surplus for the West, who will have no occasion to utter the lament of our young, unlessoned painter, "My pictures all stick to the canvas."

THE NOBLE ARMY OF MARTYRS.

As the days and years of human life roll by, as the child grows to manhood, and the man declines to age, the thoughtful and observing mind is amazed and pained at the meanness of the aims, and the littleness of the deeds accomplished. The promise of the child is beautiful as the blush of the opening rose, but tears and frowns and fits of anger do not cease their sway with the coming on of maturer years, but reign on, strengthened and sustained by envies, enmities, and unholy ambitions. Then come the cares of this world, and sorrows grievous to be borne, and all the time the heart grows hard and the hands weak, and the lethargy of selfishness settles

down on the muscles and sinews of the soul. Glorious is he who breaks this ever deepening stupor and works some noble deed. And what shall be said of him who, having brought into subjection all internal enemies, presses on through a world of opposition, and, undaunted by long suffering and agony. yields up at last his life for some great end? Such do not live in vain, but they are few. The snow-white drops of spray rise for a moment on the crest of the ocean wave, and then sink back into the dark wilderness of waters beneath. Thus rises the radiance of nobler lives into the light, but scarcely do we turn to gaze upon it, ere the wave falls, and the white drops sink into the great ocean of life, and we forget them. Rage on, wild Ocean! Thy great waves cannot hide the pure drops mingled there; there is One who will bring them forth as pearls, in the day when he maketh up his jewels. There are some who have left name, and fame, and houses, and lands. and friends for Christ's sake, and some who for the love of truth have died at the torture, and who amid pain and agony have smiled to think of heaven. But behind this glorious shining galaxy, we see through the gathering dimness of ages. a quiet band with meek and patient mien. There is no halo round their brows, their countenances are veiled in obscurity. and the memory of their names is not with us. These are they who have lived for truth! Self-denial and resignation blossomed in their lives, and shed their modest fragrance over The sun looked down upon them. They were loving, and forgiving, and doing good, and the stars saw that ere they slept, they prayed. Here stands the toiling child of poverty. the patient sufferer, the loving child, the angel mother. The eye of the world notes not their deeds, but ministering spirits fold their pinions at the side of such, and gaze in reverence. Duty calls on some to clothe themselves in armor. It bids them be wary, be brave, be strong. It says to them, "For the myriads of foes that battle thee, stop not; for these clouds that overlang thee, stop not; for the towering mountain, stop not. Shrink not at famine, pestilence, rapine, and war." And to another it says, "That little wish subdue; that craving refuse to gratify; that hour devoted to pleasure give to some act

of charity; take thy hoarded treasure and give it to one whose need is greater than thine." Many are those who live and die in the performance of these little acts of duty, in the satisfying of numberless little demands which tell upon the strength and patience of the soul as a few great exertions never would.

"And so they pass away to their long rest:

Each fills a station, suffers care and pain,

Feels joy and sorrow, with dear friends is blest,

Is dust again."

These have not the meed of fame. They are "fireside martyrs!"—"martyrs whom time knows not." The dull ear of glory cannot hear the "fine and unheard melody unto which they have tempered and subdued their souls," but its sweetness and beauty are echoed on the harps of the immortals.

CHARLOTTE.

THE BEGGAR.

A beggar through the world am I, — From place to place I wander by: Fill up my Pilgrim's scrip for me, For Christ's sweet sake and charity!

A little of thy steadfastness,
Rounded with leafy gracefulness,
Old Oak, give me, —
That the world's blasts may round me blow,
And I yield gently to and fro,
While my stout-hearted trunk below
And firm-set roots unmovéd be.

Some of thy stern, unyielding might,
Enduring still through day and night
Rude tempest-shock and withering blight, —
That I may keep at bay
The changeful April sky of chance
And the strong tide of circumstance,—
Give me, old Granite gray.

Some of thy mournfulness serene,
Some of thy never-dying green,
Put in this scrip of mine, —
That griefs may fall like snow-flakes light,
And deck me in a robe of white,
Ready to be an angel bright, —
O sweetly-mournful Pine.

A little of thy merament,
Of thy sparkling, light content,
Give me, my cheerful Brook,—
That I may still be full of glee
And gladsomeness, where'er I be,
Though fickle Fate hath prisoned me
In some neglected nook.

Ye have been very kind and good
To me, since I 've been in the wood;
Ye have gone nigh to fill my heart;
But good-bye, kind friends, every one,
I 've far to go ere set of sun:
Of all good things I would have part,
The day was high ere I could start,
And so my journey 's scarce begun.

Heaven help me! how could I forget To beg of thee, dear Violet! Some of thy modesty, That flowers here as well, unseen, As if before the world thou'dst been, O, give to strengthen me!

GENTLEMANLINESS.

[At the recent meeting of the American Institute, remarks were made upon the teacher's gentlemanly bearing by a gentleman whose example is so clear an illustration of his doctrine that we regret our absence on the occasion. The following article had been given us previously to that time. As our magazine is not confined, in its circulation, to our own profession, we are sure its suggestions will find ready acceptance and response among all readers. We have "in our mind's eye," many individuals, of various professions, whose office is to oversee the work and fidelity of teachers, who commit a much greater oversight in the elegance or even decency of their manners; and we know many, very many instructors, to whom courtesy is an occult science, and the language of polite intercourse, especially with their pupils, one of the unwritten tongues.

At a time when such a hearty and general interest is everywhere, in the free States of the Union particularly, awakened to the immeasurable importance of education, moral, physical, and intellectual, it is a mortifying consideration, that another important and highly practical department is rarely, if ever, alluded to. We refer to that species of training, — we know not in what category to place it, — which prepares the individual, who is favored with its discipline, to perform his part in society, whatever that part may be, with an easy, graceful bearing, and which will not fail to be pleasing to every one who may witness it. Whether he sit or stand or walk, whether he meet or separate from a friend, whether he enter or withdraw from his neighbor's house, whether he be in the street or in the church, in all places and under all circumstances, his whole demeanor will be such as befits a well-bred gentleman.

We would have every youth educated to be, in one prominent point of view, a Chesterfield, superadding, however, by all means, to the original, that in which he was certainly sadly deficient, - a generous sincerity of feeling and honesty of purpose, without which all graceful and gentlemanly bearing is hollow and worse than useless. We have known individuals of high moral and intellectual culture, and filling important stations in some of our literary institutions, one moiety, at least, of whose influence for good was lost to their pupils, and, of course, to society, by unattractive manners and inexcusable boorishness of deportment. They were good men, they were well-furnished with literary and scientific attainments, but there was a fatal drawback in their characters as teachers, in their manners they were absolute clowns. Ease and grace and dignity, which are so essential in forming the character of a successful teacher, constituted no part of their moral attire. They knew nothing of the art of winning the confidence and kind sympathy of those committed to their tuition. The public good demands that they should resign their places, and put themselves, at once, under the instruction of some French teacher of good manners.

Too many of our teachers in sacred things are, we are sorry to say, most lamentably wanting in the same thing, an obvious deficiency in good taste and gentlemanly manners. They don't know how to behave in the church or out; they disgust when they are solicitous to please.

We were asked once by an accomplished, pious, but rather fastidious young lady in a town not very remote from F. Academy, how we were pleased with Mr. T.'s preaching the day before. "Very well," was our reply, "he preached two very able sermons for a young man." "I dare say," said she. "but it was all lost labor to me, for," continued the young lady, "the preacher came to our house Saturday afternoon, an entire stranger. My father was not at home, and it devolved on me to entertain him. We were sitting in the parlor, the stranger at one window and I at the other, the table under the glass being between us, when he, to my perfect astonishment, threw his legs, - feet, boots, and all, - over the corner of the table, in this position giving me, as he continued his conversation, the fairest chance imaginable to take a long and full view of the soles of his boots; and those same boots were in my mind's eye during the whole service on the Sabbath." The young lady was not edified. The preacher had not learned to keep his feet in the place where they belonged. He had not taken lessons in the art of sitting gracefully, and consequently his usefulness was hindered. Similar cases of harm-doing frequently occur, resulting from a want of proper attention to grace of manners.

The physician should, above all others, pay the most scrupulous attention to his person and manners. He should go through a long course of training, till the air and mien of a perfect gentleman are as natural as to breathe. His heart should be ever warm with kindness, and his countenance beam with the most animating smile of encouragement.

Some years ago, we asked a very nervous, ever-ailing lady, the highly accomplished wife of a distinguished clergyman, why she had dismissed her former physician, of eminent skill and large experience, and called in a young man of scanty education and but little observation. Dr. N.'s little finger, we remarked, is thicker than Dr. R.'s loins. "It may be all true," the ailing lady said, "but in my case it 's of no consequence, for when Dr. N. calls in professionally, he enters my sick-

room with his scowling face, asks me a question or two, feels my pulse, and, it may be, looks at my tongue, deals out some medicine, and retires; and I am none the better. But now, Dr. R. comes in, all smiling as a May morning, sits down by my side, says a few pleasant things, prescribes for my complaints, and with a smile full of encouragement bids me good day,—and withdraws. And I assure you," continued she with animation, "Dr. R.'s inspiring smile does me more good than all Dr. N.'s drugs." Our lady was a philosopher; she understood the influence of the mind upon the body.

The great Dr. Rush understood it too, and so should every physician. He should not only carry drugs in his medical pocket, but he should know how to enter the chamber of the sick, showing an enlivening smile on his countenance, and the

perfect gentleman in his whole behavior.

As in the case with the other branches of education, so with this, the claims of which we are urging, - the first lessons should be given in the family; the young fathers and mothers, be their vocation what it may, should be polite; their manners should be easy and graceful, and they should teach their first child and their second and all the rest to imitate their example. The primary teacher and those following in higher grades should be prepared and willing to carry on the discipline commenced and continued by the parents. Should such a course be pursued, before one generation shall have passed away, the entire population, with the exception of here and there an old fogy, will have become accomplished in manners. And, as it has been a thousand times recited from our school geographies, "The Persians are the French of Asia," we, in one point of view, - we beg to be understood, - shall be put down in the geographies of the next generation the world over, as the French of the New World.

Let parents and teachers in the infant school, and all the way up and through the college and professional schools, labor, both by precept and example, to bring about this glorious consummation. The virtue, the thrift, the happiness, and good influence, far and near, of our great Republic would be a sure result.

RESIDENT EDITOR'S DEPARTMENT.

AMERICAN INSTITUTE OF INSTRUCTION.

[A Discussion in regard to the relative merits of Public High Schools and Endowed Academies; continued from the September number of the "Teacher."]

After a few preliminary remarks by several gentlemen, Mr. Hagar, of Jamaica Plain, opened the discussion by saying that as he understood the question, it was whether a system of free, public High Schools for instruction should receive our favor, or whether, as a system, Endowed Academies were to be preferred. In Massachusetts, said he, we have our free common schools, and also, in a large number of towns, we have free High Schools—the latter just as free as the former. Some friends of education think endowed schools would be better than High Schools for Massachusetts. I stand here as the advocate of the Public School, whether it be the Common or the High School. The same arguments that apply in favor of the free Common School can be applied, in all their length and breath, in favor of the public High School. Why not? We have our committees and supervisors of common schools. Are they not as competent to supervise schools of a higher character? are they not as likely to be so as the corporators or trustees of endowed academies? There can be no doubt on that point.

In determining the relative merits of the two systems, one of the first questions to be settled is, Is the proposed system practicable? Can that system be generally adopted throughout the State? Now I put it to the common sense of any man; is it practicable to establish an endowed school in every town? Every man will answer, no. I maintain there should be a High School, a school of a high character, in every town. But it is out of the question to expect an endowed school in every town. Our schools should be near the doors of our families. We do not wish and cannot afford to send our children away from home to attend school. The rich only can do that. We wish to have free High Schools as near our doors as we have our common schools, and we have a right to demand, where the population will justify it, that they shall be there. The poor man needs to have his child educated, and it is for the interest of the public that his child should be educated to the highest possible point. To do that there must be a large number of schools of a high order, and they must be near; which cannot be, unless they are supported at the public charge.

Suppose a few rich men in one town establish an endowed school and make it free to all—in that town. The people of the next town desire the same advantages, but they have no rich and liberal men; and to support a school of high character they must tax themselves. They say that a few rods across the line the children are educated free, while we have to tax

ourselves; and the result is that the very fact of the establishment of the endowed school in one town, instead of favoring education in an adjoining town, has rather a tendency to depress it.

Further than that: the success of any school depends very much on the interest of the people in it; and a man's interest depends on what a thing costs him, either directly or indirectly. The man who pays a tax for the support of a school feels more interest in it than he whose child is educated where no tax is paid. Much of the interest felt and expressed has arisen from the fact that our schools are supported by taxation.

It is more democratic, too, that our schools should all be supported at the public charge; because it is a democratic principle that all men shall support the public interests in proportion to their ability. It is an important principle that all men should have a voice in some way in the education of the public. Every man who has a child to be educated ought to have an opportunity of saying how he shall be educated. It is not for half a dozen to form a close corporation and say how my child shall be educated. I have a right equal, in that respect, to my rich neighbor. It is of as much importance to me to have my child educated as I think he ought to be, as it is for the rich man to have his child educated according to his wishes.

How is it with endowed schools? A few persons elect the teacher, and say to the public, We give you what we have; if you do not like it you may stay away. I believe that in this age and in this democratic country, the public, as a whole, have a right to say what the education of the children shall be, and therefore, as a matter of great public interest, with the exception of some specific schools, they should be within the control of the people.

It may be said that the people are fickle, and will not support schools of a higher grade. I maintain that that is a libel upon the people; that as a general fact, they have been in advance of committees. Committees are always very careful to feel the public pulse before they prescribe any remedies. In more than one town I have known the people to absolutely compel the establishment of a High School, in spite of the complaints of the rich, and in spite of the cautious course of the committees.

I am not speaking against endowed schools, but in favor of the other system as a whole. Academies are necessary, scientific schools are necessary, endowed schools are necessary; but as a public school teacher, I maintain that the highest interests of the public demand that they should establish public High Schools—that they should support them. I trust the day is coming when the system of public High Schools will prevail not only in old Massachusetts, but in all our States.

Hon. Geo. S. Boutwell, Secretary of the Board of Education of Massachusetts, being called on for his views upon the question, rose, and before proceeding to its consideration, took occasion to make a suggestion as to the importance of having some persons previously designated, on whom the Institute could rely, for an original, thorough, preliminary presentation of the subjects for discussion at these meetings. None of the questions presented here had been introduced by persons so designated and prepared to speak; and it was no disparagement to the gentlemen who had spoken, to

say that the views which they have offered were not the thorough, matured views which they would themselves have given, had the subjects been assigned to them.

I am in just that position myself, said Mr. Boutwell, as to the question before the Institute. Indebted to my friend on the other side, and to you, Sir, and this audience for inviting me to take a position on this floor, I am still without any special preparation to discuss the subject. I have thought upon it, because any one, however humbly connected with free schools in this country, must have had his thoughts turned to it. And especially just now, when in the leading educational journal of Massachusetts a discussion has been conducted between one of its editors and Mr. Gulliver, the able originator of a school in Norwich, Ct., and the advocate of the system of school government established there. And therefore every one who has had his eyes open must have seen that here is a great contest, and that underlying it is a principle which is vital in all society.

The distinguishing difference between the advocates of endowed schools and of free schools is this: those who advocate the system of endowed academies all go back in their arguments to one foundation, which is, that in education of a higher sort, the great mass of the people are not to be trusted. And those who advocate a system of free education in High Schools put the matter where we have put the rights of property and liberty, where we put the institutions of law and religion - upon the public judgment. And we will stand there. And if the public will not maintain institutions of learning, then, I say, let institutions of learning go down. [Applause.] If I belong to a State which cannot be moved from its extremities to its centre, and from its centre to its extremities, for the maintenance of a system of public instruction, then, in that respect, I disown that State; and if there be one State in this Union whose people cannot be aroused to maintain a system of public instruction, then they are false to the great leading idea of American principles, and of civil, political, and religious liberty. [Renewed applause.]

Now we might specially enumerate the advantages of a system of public education, and the evils - I say evils - of endowed academies, whether free or charging payment for tuition. Endowed academies are not, in all respects, under all circumstances and everywhere, to be condemned. If I were to discuss this subject at length, it would be well enough for me to state the view which I have as to the proper position of endowed academies. They have a place in the educational wants of this age. But I regard private schools which do the work usually done in public schools as temporary, their necessity as emphemeral, and think that under a proper public sentiment they will soon pass away. They cannot stand, - such has been the experience in Massachusetts, - they cannot stand by the side of a good system of public education. Yet where the population is sparse, where there is not property sufficient to enable the people to establish a High School, then an endowed school may properly come in to make up the deficiency, to supply the means of education to which the public wealth, at the present moment, is unequal. Endowed institutions very properly, also, take upon them the business of giving a professional education to the people. At this moment we cannot look to the public to give that education which is purely professional. But what we do look to the public for is this: to furnish the means of education to the children of the whole people, without any reference to social, pecuniary, political, or religious distinctions, so that every individual may have that primary preliminary education which shall fit him for the ordinary business of life.

It is said that the means of education are better in an endowed academy or in an endowed free school than they can be in a public school. What is meant by means of education? I understand that first and chiefly, as extraneous means of education, we must look to a correct public sentiment, . which shall animate and influence the teacher, which shall give direction to the school, which shall furnish the necessary public funds. Now I say that an endowed free academy can have none of these things permanently. Take, for example, the free school established at Norwich by the liberality of thirty or forty individuals contributing \$90,000. What security is there that fifty years hence, when the educational wants of the people shall be changed, when the population of Norwich shall be double or treble what it is now, when science shall make greater demands, when these forty contributors shall have passed away, this institution will answer the wants of that generation? According to what we know of the history of this country, it will be entirely inadequate; and though none of us may live to see the prediction fulfilled or falsified, I do not hesitate to say that it will ultimately prove a failure, because it is founded on a mistake.

Then look and see what would have been the state of things, if there had been public spirit invoked to establish a public High School, and if the means for its support had been raised by taxation of all the people, so that the system of education would have expanded according to the growth of the city, and year by year would have accommodated itself to the public wants and public zeal in the cause. But now, though these means look ample, they will by and by be found too limited. The school at Norwich is encumbered with regulations; and so every endowed institution is likely to be, because the right of a man to appropriate his property to a particular object carries with it, in the principles of common law, and in the administration of the law, in all free governments, the right to declare, to a certain extent, how that property shall be applied. Rules have been established - very proper and judicious rules for to-day. But who knows that a hundred years hence they will be proper or acceptable at all? They have also established a Board of Trustees, ultimately to be reduced to twenty-five. These Trustees have power to perpetuate themselves. Who does not see that you have severed this institution from the public sentiment of the city of Norwich, and that ultimately that city will seek for itself what it needs, and that, a hundred years hence, it will not consent to live according to the civilization of that time, under the regulations which forty men have now established, however wise those regulations may at the present moment be?

One hundred and fifty years ago, Thomas Hollis of London made a bequest to the university at Cambridge, with a proviso that on every Thurs-

day, a Professor should sit in his chair to answer questions in polemic theology. All well enough then; but the public sentiment of to-day will not carry it out.

So it may be with the school at Norwich a hundred years hence. That man or that State which sacrifices the living public judgment to the opinion of a dead man, or a dead generation, makes a great mistake. We should never substitute beyond the power of revisal, the opinion of a past generation for the opinion of a living generation. I trust to the living men of today as to what is necessary to meet our existing wants, rather than to the wisest men who lived in Greece or Rome. And if I would not trust the wise men of Greece and Rome, I do not know why the people, a hundred years hence, should trust the wise men of our own time.

And then look further, and see how, under a system of public instruction. you can build up, from year to year, in the growth of the child, a system according to his want. A system of private instruction can do no such thing. What do we do where we have a correct system? A child goes into a primary school. He is not to go out when he reaches a certain age: he might as well go out when he reaches a certain height; there would be as much merit in one case as in the other. But he is advanced when he has made certain attainments. Who does not see that the child is incited and encouraged and stimulated by every sentiment to which you should appeal? And then, when he has gone up to the grammar school, we say to him, You are to go into the High School when you have made certain attainments. And who is to judge of those attainments? A committee appointed by the people, over whom the people have some ultimate control. And in that control, they have a security for two things: first, that they shall not be suspected of partiality; and second, that they shall not be actually guilty of partiality. And in the same manner, there is security for the proper connection between the High School and the schools below. But in the school at Norwich, - of which I speak because it is now prominent, - you have a board of twenty-five men, irresponsible to the people. They select a committee of nine: that committee determines what candidates shall be transferred from the grammar schools to the High School. May there not be suspicion of partiality? If a boy or girl is rejected, you look for some social, political or religious influence which has produced the difference, and the parent and child complain. Here is a great evil; for the real and apparent justice of the examination and decision by which pupils are transferred from one school to another, is vital to the success of the system.

At this point Mr. B. gave way and took his seat; but the Institute demanded that he should go on so peremptorily, that Mr. B. said that though he thought he had better not, yet as he was an advocate for the public judgment, he would yield to it here. He therefore proceeded to say:—There is another advantage in the system of public High Schools, which I imagine the people do not always at first appreciate. It is, that the private school, with the same teachers, the same apparatus, and the same means, cannot give the education which may be, and usually is, furnished in the public schools. This may seem a statement which requires some considerable

support. We must look at facts as they are. Some people are poor - I am sorry for them; some people are rich - and I congratulate them upon their good fortune. But it is not so much of a benefit, after all, as many think. It is worth something in this world, no doubt, to be rich; but what is the result of that condition upon the family first, the school afterwards, and society finally? It is, that some learn the lesson of life a little earlier than others; and that lesson is the lesson of self-reliance, which is worth more than - I will not say, a knowledge of the English language - but worth more than Latin or Greek. If the great lesson of self-reliance is to be learned, who is more likely to acquire it early, - the child of the poor, or the child of the rich? the child who has most done for him, or the child who is under the necessity of doing most for himself? Plainly, the latter. Now, while a system of public instruction in itself cannot be magnified in its beneficial influences to the poor and to the children of the poor, I stand here and everywhere to maintain that the system of public instruction is equally beneficial to the rich in the facility it affords for the instruction of their children. Is it not worth something to the rich man, who cannot, from the circumstances of the case, teach self-reliance around the family hearth, to send his child to school to learn this lesson with other children, that he may be stimulated, that he may be provoked to exertions which he would not otherwise have made? For be it remembered that in our schools public sentiment is as well marked as in a college, or a town, or a nation; that it moves forward in the same way. And the great object of a teacher should be to create a public sentiment in favor of virtue. There should be some pioneers in favor of forming a correct public sentiment; and when it is formed it moves on irresistibly. It is like the river made up of drops from the mountain side, moving on with more and more power, until every thing in its waters is carried to the destined end.

So in a public school. And it is worth everything to the man of wealth, that there may be, near his own door, an institution to which he may send his children, and under the influence of which they may be carried forward. For, depend upon it, after all we say about schools and institutions of learning, it is nevertheless true of education, as some politician, whose name I will not mention, has said of the government, that the people look to the school for too much. It is not, after all, a great deal that the child gets there; but if he only gets the ability to acquire more than he has, the schools accomplish something. But if you give a child a little knowledge of geography or arithmetic, and have not developed the power to accomplish something for himself, he comes to nothing in the world. But put him into the school where he must learn something for himself, into the primary, grammar, or High School, and he will be fitted the better for the world of life into which he is to enter.

You will see in this statement that with the same parties, the same means of education, the same teachers, the public will accomplish more than the private schools.

I find every where, and especially in the able address of Mr. Gulliver, to which I have referred, that the public schools are treated as of questionable

morality, and that something would be gained by removing certain children from the influence of these schools. If I were speaking from another point of view, very likely I should feel bound to hold up the evils and defects of public schools; but when I consider them in contrast with endowed and private schools, I do not hesitate to say that the public schools compare favorably; and as the work of education goes on, the comparison will be more and more to their advantage. Why? I know something of the private institutions in Massachusetts; and I can pick out boys who have left the public schools because they have fallen in their classes; and the public interest would not justify their continuance in the schools. It was always true that private schools did not represent the world exactly as it was. But it is worth every thing to a boy or girl, man or woman, to look the world in the face as it is.

Therefore the public school, when it represents the world as it is, represents the facts of life. Now the private school never has done and never will do this; and as time goes on it will be less and less a true representative of the world. From this point of view, I should say it is a mistake on the part of parents to desire to exclude their children from the world. Is it not better that the child should learn something of society, even of its evils, when under your influence, and when you can control him somewhat by your counsel and example, than to permit him finally to go out, as you must when his majority comes, perhaps to be seduced in a moment, as it were, from his allegiance to virtue? Virtue is not exclusion from the presence of vice; but it is resistance to vice in its presence. And it is the duty of parents to provide safeguards for the support of their children against these temptations. When Cicero was called on to defend Murena against the slander, that he had lived in Asia, and consequently had been guilty of some crimes, and when the testimony failed to substantiate the charge, Cicero said, "If Asia lies under any imputation of luxury, there can be no glory in never having seen it, but in living temperately in it." And we have yet higher authority. It is not the glory of Christ or of Christianity, that its Divine Author was without temptation, but that, being tempted, he was without sin. This is the great lesson of the day.

The duty of the public is to provide means for the education of all. To do that we need the political, social, and moral power of all to sustain teachers and institutions of learning; and endowed or free schools, depending upon the contributions of individuals, can never, in a free country, be dignified into a system. If you rob the public schools of the influence of our public-spirited men, if they are to take away a portion of their pupils from them, our system is impaired. It must stand as a whole, educating the entire people, and looking to all for support, or it cannot be permanently maintained.

LEANDER WETHERELL, of Boston, followed Mr. Boutwell in the further discussion of the subject. He commenced by remarking that the subject, as announced, did not involve a discussion of the merits of the Public High Schools of Massachusetts, and the Endowed Academy of Norwich, Ct., — but the relative merits of Endowed Schools and Public High Schools, — the

former being partially or entirely supported by endowment, and the latter by direct taxation.

He assumed as a position, what could not here nor elsewhere be successfully combated and overthrown, to wit, that the obligation and duty of educating children rest primarily where God placed them, — on their parents; it being not less their duty to educate, than to feed, clothe, and provide homes for their children. If parents are incompetent, or lack the time to instruct their children properly, then the next best method is to employ a teacher to come into the family to assist them; but if they are not able to do this, then let them select such school or schools as they may deem competent, whether endowed or public.

He then proceeded to consider the "merits" of these two classes of schools. Endowed schools, as he defined them, included all that receive aid in their support from other sources than that of direct taxation. Hence, he claimed that the Normal Schools of Massachusetts owed their existence to the private munificence of the late Edmund Dwight, of Boston, who proposed to give \$10,000 to promote the cause of popular education in Massachusetts, on condition that the Commonwealth would contribute an equal sum from unappropriated funds. The conditions were met, and three Normal Schools were opened. Beside this, each town of the aforesaid Commonwealth is entitled to draw, conditionally, a certain sum from the State Treasury, to aid in the support of its public schools. Thus is the inference clear, that what is popularly denominated the public school system of Massachusetts is not supported entirely by direct taxation.

By referring to endowed schools, it will be seen that while some, — and the number is very small, — admit pupils without any charge, the great majority of them demand that tuition bills shall be paid by all who are able. This is true of the best class of endowed academies, such as Phillips at Andover, Lawrence at Groton, Williston Seminary at Easthampton, Phillips at Exeter, N. H., and the Packer Institute at Brooklyn, N. Y. These are all open for pupils from everywhere, one of the afore-mentioned endowed schools having boys at this time from nearly every State in the Union. Hence, this class of schools seem quite as justly entitled to being regarded as public schools as those confined to the limits of a town corporation.

Concerning the "merits" of endowed schools, Mr. W. thought the students of Phillips, Lawrence, Easthampton, and other similar schools, would compare favorably with those of the public High Schools of Massachusetts. Teachers and schools of every grade should be judged of by their fruits, or results, as are farmers and mechanics. This being the test, endowed schools have nothing to fear from comparison with public High Schools; and though comparisons may seem invidious, inasmuch as the friends of public schools have challenged it, the friends of endowed academies will most cheerfully abide the issue.

It is urged against endowed schools, that they are "encumbered with regulations;" that their administration renders the committee for examining pupils for admission, liable to "suspicion of partiality." All this is as true of the public High School as of the endowed academy of Norwich, or Mt.

Holyoke Seminary at South Hadley, or any other similar school where candidates are examined prior to admission. Thus, having shown that this objection lies with equal force against public High Schools, it proves nothing for them over endowed schools. One of the best features of endowed schools, in connection with their permanency, is their excellent government,—it usually being placed under the direction of the best men of the State.

Mr. W. denied the justice of taxing the people for the support of public High Schools, maintaining that the education sought through their instrumentality looked toward a profession, which those enjoying the High School have in view, and by which they hope to gain a more lucrative support. Mr. W. contended that a commonwealth was no more under obligation to do this, than to provide the means for making mechanics, artists, or fitting boys for any other vocation whereby they are to gain their subsistence. The number that does or can avail itself of the advantages of a public High School in any town, is, relatively, very small; and of this, a large majority would educate their sons at the academies where the parents of more than three-fourths of the towns of Massachusetts are now obliged to do it, if they desire a higher culture than that furnished by common schools. Only ninety towns in the State are legally bound to support High Schools, and of these only about one half have complied with the law. There is much complaint of the injustice and inequality of the public High School system, where introduced.

It is further urged in favor of public High Schools, that "private schools," or schools other than the public, "with the same teachers, apparatus, and means of educating, cannot give the education the public schools can." This was shown to be naught but assertion, as seen by referring to what was said of the "merits of the two systems."

Endowed schools were regarded by their opponents as "necessary evils," "and will be found to be a failure because founded on a mistake." This will be set down as a discovery of the nineteenth century, and must pass away long before it shall close; for endowed schools have existed and successfully flourished for many centuries, as a necessary element of enlightened and Christian civilization. Shall we denounce such schools as have given the world a Shakspeare, a Milton, a Cromwell, and a long line of writers far too numerous to mention, as "temporary evils, soon to pass away?"—for "such" it is said, "is the experience of Massachusetts." *

"Self-reliance," claimed as an important or peculiar feature or development of the public school system, was claimed by Mr. W. as having been most extraordinarily developed independent of all schools, as he amply illustrated; also, that the self-denial practised to provide the means of attending the academy was well calculated to teach one reliance on his own means and

^{*}For the last twenty years the number of academies and private schools has diminished from 854 to 771. The last two or three years have shown an increase in the number of these schools, showing that a reaction is taking place, giving indication that their existence may yet continue many years to come. Boston supports a large and increasing number of excellent private schools, whose returns afford their teachers better tilvings than the very liberal salaries of the grammar schools, or the public High Schools, thus demonstrating that such schools are appreciated in a city of superior public schools.

powers. Of the former class, Stone, Franklin, Burritt, Hugh Miller, and Hitchcock are eminent examples; of the latter, Sparks, Van Buren, and the names of hosts of others will suggest themselves to the reader, as striking illustrative cases of self-reliance.

While Mr. W. admitted that the policy of the public school system of Massachusetts is probably the best that can be adopted in the present state of society, and thus met his qualified approval, he denied the right to tax the people for furnishing more than what is denominated a good common education, such as time and circumstances may allow every child to obtain. All beyond and above this, may and should be regarded as being more or less professional, having for its end such qualifications as give one the ability to "live by his wits." There can be neither equality nor justice in taxing the entire community to support a public High School within its limits, to give one pupil of a hundred this superior education. As well might this doctrine be carried to its extremest point, as it has been by some, that the State should not only make the public schools entirely free, but the colleges, seminaries, universities, and all professional schools, not less of medicine, law, and divinity, than of the art of teaching. Few now go to this extreme, yet taxing the many to support public High Schools for the few, is one step toward such a conclusion.

There need be and should be no conflict nor rivalry between public and endowed schools. Each has its own work to do, and let the strife be to see which can do it best. Then there will be neither time nor labor wasted in decrying each other's ability to do the work of its own province, for the praises of both, alike, will be heralded by their generous disciples, provided the work of mental discipline, culture, and training has been well done.

Mr. Goodwin, of Lowell, expressed his surprise that any one should advocate taking the business of education from the public and giving it to a few. We want a system of education that shall deal with all, that shall go forth with kindly authority into the highways and compel the children to come in. As it was said of Howard, that "he remembered the forgotten," so in a system of schools, that is what is needed. If the parent refuses to educate his child, society may step in, and as a measure for self-preservation, may do it.

Mr. Charles Hammond, Principal of the Lawrence Academy at Groton, said he considered the question a very narrow one, having reference only to that class of schools which come in competition, as local academies, with the so-called High Schools, and having nothing to do with that class of institutions, in Massachusetts or New Hampshire, known by the name of academies in distinction from High Schools. It has reference to such schools as the Punchard School and the school in Norwich, Conn. The term "public" does not apply to every body until the public are ready to avail themselves of the privileges offered; for even in Boston a great part of the population never reach the public High School. The High School is for training the higher class of students — in ability — within a limited territory. So it is in Cambridge; so in Dorchester. But a small town on

the other side of the line has no right there. The schools are shut in within certain boundary lines; they are not universal.

The word "academy" is also well understood. The effect of what is said, however, is what the logicians call the argumentum ad invidian; that because the term "public" is not applied to them, therefore they are not public. But they are public in every sense of the word. Boston is but a small part of the public; Dorchester is a small part of the public; but Phillips Academy opens its doors to the world; therefore, as it affects the individual who attends the school, the advantage is in favor of the latter. The academies in Massachusetts are public institutions; they are founded by law; if their funds are diverted there is a remedy in law; and the assumption that they are not public, when brought into competition with High Schools, is an unfounded assumption, and therefore all the arguments resting on that assumption must fall to the ground. The institution at Norwich is a sort of sui generis. That is a territorial institution, confined within narrow limits. It resembles an academy in the fact that it is a close corporation; but it does not resemble one in any other respect; for it is just as limited as any other high school.

The question is mainly one of political economy, for in either case there would doubtless be equally good teachers, and the pupils would have the same facilities. Take such a school as one of the best Boston High Schools. and that at Andover, and what is the difference on the character of those who attend them? In the one case the students are all from the same neighborhood, and in the other they are from all parts of the country, so that the boy from refined society mingles with those of a ruder sort, and there is a class of advantages from this association, from the triturating

processes which work upon each.

Academies are not ancient in their origin, and they are democratic in their tendencies. They were founded to supply a want in the education of the people of the country, - to diffuse, and not to render exclusive, the advantages of education, so that in districts of the country where the population is sparse, there might be as good opportunities for education as are given in the Boston schools.

M. BOUTWELL again took the floor, and re-stated some of the points of his address in the forenoon, and then, in reply to the remarks of Mr. Wetherell, he read the following passages from the address of President Walker,

at Springfield, last year : -

"In several of our cities and large towns, the High School, as already intimated, has begun to compete successfully, not only with the most expensive private schools, but also with the oldest and best endowed academies; as well appointed in all respects, and having some peculiar advantages as regards study and discipline, which independence on private patronage enables it to carry out.

"A large and continually increasing proportion of those who enter college, come from these schools; and it is but justice to add, none, as a general rule, come better prepared. In fact, it is to the influence of these schools, more than to any other cause, that I ascribe the greatest and most fundamental improvement which has been made of late years, in what is termed, by way of distinction, a liberal education."

Upon that evidence, coming from the head of one of the colleges of New England, I rest the statement I made this morning, said Mr. B., that in the essential ability of the High Schools to afford a successful, logical, symmetrical, perfect education, they are better adapted to the work than any academy or private institution can possibly be. And upon that I stand, because I believe there is in the relation of patron and patronized a defect in the system of education, in endowed academies, which is vital, when you speak of that system as a public system.

As to the idea suggested by Mr. Wetherell, that Mr. Dwight endowed the Normal Schools legally by giving \$10,000, he did no such thing. He put no restriction upon the money, except that it should be applied to the schools. He neither asked for himself or his successors any control of it. I fancy that the whole legal history of this matter, in this country and in New England, goes to one point, which is, that an endowed school is a school established by a person by his own wealth, to be controlled by him or his successors forever, according to the statutes which he may have established. The gentleman before me (Mr. Hammond,) says Phillips Academy is a public institution. I say that neither legally nor in the public judgment is it any such thing. Institutions, legally, are of two sorts, public and private. A private institution is one endowed by an individual or a limited number of men, who define the purposes to which it is to be devoted, eleemosynary or other, fix the regulations, and provide for the officers; and they, being dead, live through the laws they formed. This is the way in which Phillips Academy lives, according to the will of the man who established it, and who, "being dead, yet speaks." Though it may be open to the public, is open to the public, on certain conditions, it is not public any more than a convent. The doors are open on certain terms: come in if you please; but it is not a public institution. A public institution is one established by the public, sustained by the public, controlled by the public, accessible to the public.

To Fix the Attention. — All objects in nature have their superficial properties, and all have also their profounder properties, which are deep-seated and hidden, which seem put away from the common gaze, and can be brought to light by those only who will penetrate to the depths where they lie.

Volatile minds, accustomed to skim lightly over the surfaces of things,—
to touch many, but to penetrate none,— can be acquainted with shows and
appearances only.

Those minds which have the power of fixing the attention upon objects will master their inherent properties and attributes, and thus obtain a knowledge whereby all the works of nature may be converted into use.

To invest a pupil with the power of fixing the attention, confers upon him a benefit greater by far than any amount of mere knowledge.

To do this, teach the pupil to command the eye, by looking steadily upon the book, slate, or blackboard, and upon the teacher himself when he is imparting oral instruction. If the mind does not command the eye, the eye will command the mind.

The same remarks apply to the management of the ear. While attending recitation, the pupil should be trained to such immobility of position, his senses to such a fixedness of attention, that nothing trivial can unloose them.

ENDURANCE OF LITERARY LOSSES. — Of all the losses of property, none would seem so disheartening as to lose the proceeds of protracted mental toil, and it is surprising with what patience these trials have usually been borne, and with what fortitude and resolution they have been repaired. The resignation of Fenelon surpassed that of Saint Cyran himself. His papers were consumed in a fire which burnt down the palace of Cambrai. The Abbe de Langeron hastened to Versailles to inform him of the disaster. He found him quietly conversing with some friends, and the Abbe endeavored to break the news by degrees.

"I know it," interrupted the Archbishop; "but it is better that my house should be destroyed than the cottage of a poor man," and he tranquilly resumed the former conversation.

When Cooper, the author of the Latin Dictionary, had been employed eight years upon his work, his wife, who had been a shrew, put it on the fire. The indomitable lexicographer commenced it anew, and in eight years more completed his task.

Porson spent ten months of incessant toil in copying in his beautiful hand the almost obliterated manuscript of the Lexicon of Photius. When the copy was burnt he sat down unruffled to make a second, which he completed in the same perfect style as the first.

All authors, however, have not displayed the same self-command. A fire consumed the observatory and manuscripts of Hevetius, and such was his regret at the destruction of some astronomical notes, that he wrote eight years afterwards that he never thought of it without shedding tears. Father Simon, the author of the well-known "Critical Histories of the Old and New Testament," was denounced by the Jesuits to the Intendant of Rouen, and, fearing that his manuscripts would form the ground of a charge against him, in the first impulse of alarm he committed them to the flames. No sooner was it done than his regret brought on a violent fever, which killed him in three days.

An accidental fire destroyed a work of Urcæus, which he had just completed. Pouring forth a torrent of abuse on the Virgin and the saints, he rushed into a wood, where he spent the day in a continuous delirium. He passed the night on a dunghill, and next morning took refuge in the cottage of a poor joiner, and remained with him six months, renouncing alike the companionship of his books and his friends. What an effectual anti-dote it would have been to his grief if he could have rated his works at the same value as they were rated by the world!— Quarterly Review.

TRUE GREATNESS. — He that can understand and delight in greatness was created to partake of it; the germ is in him; and sometimes this ad-

miration, in what we deem inferior minds, discovers a nobler spirit than belongs to the great man who awakens it; for sometimes the great man is so absorbed in his own greatness as to admire no other; and I should not hesitate to say, that a common mind, which is yet capable of a generous admiration, is destined to rise higher than the man of eminent capacities, who can enjoy no power or excellence but his own. — Channing.

1

Tale-Bearing. — Never repeat a story, unless you are certain it is correct, and even not then, unless something is to be gained, either of interest to yourself, or for the good of the person concerned. Tattling is a mean and wicked practice, and he who indulges in it grows more fond of it in proportion as he is successful. If you have no good to say of your neighbor, never reproach his character by telling that which is false. He who tells you the faults of others, intends to tell others of your faults; and so the dish of news is handed from one to another until the tale becomes enormous. "A story never loses anything," is wisely remarked; but, on the contrary, gains in proportion as it is repeated by those who have not a very strict regard for truth. Truly, "the tongue is an unruly evil, full of deadly poison."

MATHEMATICAL QUESTIONS AND SOLUTIONS.

QUESTION 38. By dividing 1 by 1-a, we obtain the infinite series, $1+a+a^2+a^3+$ &c. Are we justified in assuming $\frac{1}{1-a}=1+a+a^2+$ &c. to infinity, when a is greater than unity?

QUESTION 39. A hires a horse to go from M to N and back, for four dollars. He rides to N alone, but on his return he brings B with him. Ought B in justice to pay one-third or one-fourth of the four dollars?

D. W. H.

QUESTION 40. Given the vertical angle, the difference of the sides about it, and the altitude, to construct the triangle.

M. C. S.

SOLUTION OF QUESTION 18.

The velocity of the water flowing through the orifice is equal to that which a body would acquire, falling freely through the distance of the orifice from the surface of the water in the cistern, or 8 feet. The formula for velocity, the space being given, is, $v = 8\sqrt{s}$. The velocity at the orifice is, therefore, equal to $8\sqrt{8}$; and the velocity 4 feet below, or 12 feet from the surface, is $8\sqrt{12}$. Now the velocities of the water at any two points are inversely as the squares of the internal diameters of the pipe at those points.

Let D be the diameter of the orifice, and d the diameter of the pipe 4 feet below. Then $d^2: D^2 = \sqrt{8}: \sqrt[4]{12}$, $d^2 = D^2 \sqrt{\frac{2}{3}}$, $d = D \sqrt[4]{\frac{2}{3}} = 4 \sqrt[4]{\frac{2}{3}} = 3.61 + in$. Ans. The form of the stream or of the tube, will resemble that of an inverted cone; or it may be considered as that of an inverted cone, whose slant heights are asymptotical curves.

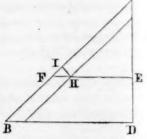
G. S. H.

Our correspondent has assumed that a body falls freely just 16 feet in the first second of its descent, and he has not told us the class to which the curve belongs.

ED.

SOLUTION OF QUESTION 25.

Let AB be one of the rafters, AD the line bisecting the distance between their lower extremities, and therefore perpendicular to BD, which represents half of this distance. Through E, 6 feet above D, draw EF parallel to BD, and HI perpendicular to AB. Then we have given AB = 20 ft., BD = 15 ft., and HI = 6 in., to find twice HE.



 $AD = \sqrt{AB^2 - BD^2} = 13.22$ ft.; AE = AD - ED = 7.22 ft. From similar tri-

angles, AD: BD \rightleftharpoons AE: EF; \therefore EF \rightleftharpoons 8.19 ft. The triangles ABD and HFI are equiangular and hence similar, \therefore AD: AB \rightleftharpoons IH: FH, \therefore FH \rightleftharpoons .75 ft., EH \rightleftharpoons EF \rightarrow FH \rightleftharpoons 7.44 ft., and 2EH \rightleftharpoons 14.88 ft. Ans.

F. A. D

Carmi, Ill.

SOLUTION OF QUESTION 27.

(1)
$$x^2 + y^2 + xy = a$$

(2)
$$x^2 + z^2 + xz = b$$

(3)
$$y^2 + z^2 + yz = c$$
.

Subtracting (2) from (1), and (3) from (2),

(4)
$$y^2 - z^2 + x (y-z) = a - b$$
,

(5)
$$x^2 - y^2 + z$$
 $(x - y) = b - c$; hence, dividing (5) by (4),

(6)
$$\frac{x-y}{y-z} = \frac{b-c}{a-b}; \text{ put } \frac{b-c}{a-b} = d, \text{ then }$$

$$x = (d+1) \ y - dz. \text{ Substitute this in (1),}$$

(7)
$$(d^2 + 3d + 3) y^2 - (2d^2 + 3d) yz + d^2 z^2 = a$$
.

$$(3d+3) y^2 - (3d+3) dyz = a - d^2c$$
:

$$y^2 - dyz = \frac{a - d^2c}{3d + 3} = m$$
, (for the sake of simplicity), ...

$$z = \frac{y^2 - m}{dy}$$
. But (3) gives $z = \sqrt{c - \frac{3}{4}y^2 - \frac{1}{2}y}$, ...

$$\frac{y^2 - m}{dy} + \frac{1}{2}y = \sqrt[3]{c - \frac{3}{4}y^2}, :.$$

$$y^{4} - \frac{2m + dm + cd^{2}}{d^{2} + d + 1}y^{2} = -\frac{m^{2}}{d^{2} + d + 1}.$$
Put the coeficient of $y^{2} = 2k$, and $-\frac{m^{2}}{d^{2} + d + 1} = -h$,
$$y^{4} - 2ky^{2} = -h$$
, and $y = \sqrt{k - \sqrt{k^{2} - h}}.$

In a similar manner we can find x and z.

M. C. S.

SOLUTION OF QUESTION 29.

Let
$$x + y =$$
 the number; then
 $x^2 + y = y^2 + x$; from which
 $x^2 - y^2 = x - y \cdot x + y = 1$.

The sum of the numbers is 1, and any two numbers whose algebraic sum is unity will answer the conditions of the question. Let x-y=a; then

$$x = \frac{1+a}{2}$$
 and $y = \frac{1-a}{2}$

Solved also by M. C. S., W., and by the proposer.

SOLUTION OF QUESTION 30.

(1)
$$x^6 y^3 - x^{12} = 9728$$
.

(2)
$$x^2 y^5 + x^8 y^2 = 40320$$
.

Put
$$y = \frac{3}{2} x^2 z$$
; then,

(3)
$$27 x^{12} z^3 - 8 x^{12} = 77824$$
, and

(4)
$$243 x^{12} z^5 + 72 x^{12} = 1290240$$
; whence

$$\frac{27 z^3 - 8}{243z^5 + 72z^2} = \frac{19}{315} : 4617z^5 + 1368z^2 = 8505z^3 - 2520.$$

By the method of divisors,* we at once find z = 1, \therefore (3) becomes $27 x^{12} - 8 x^{12} 77824$, or

$$x^{12} = 4096$$
, $x^4 = 16$, $x = 2$, -2 , or $\pm 2\sqrt{-1}$; $y = \frac{2}{3}x^2 = 6$, 6, or $3\sqrt{-1}$.

M. C. S.

SOLUTION OF QUESTION 31.

Bisecting the angles of the triangle, inscribing the circle in the usual way, drawing radii to the points of contact, forming a side of the square by connecting the extremities of the radii perpendicular to each other, and noticing the equality of triangles, the reader will find no difficulty in comprehending the following demonstration.

Let r represent the radius, and x and y the legs of the triangle. Then r + d = side of the square; hence,

$$2 r^2 = r^2 + 2 rd + d^2,$$

 $r^2 - 2 rd = d^2 : r = d (1 + \sqrt{2}).$ But,
(1) $x + y = h + 2 r$, and (2) $x^2 + y^2 = h^2$. From which

^{*} The method of divisors is not a method of approximation.

$$x = \frac{h+2 \ r \pm \sqrt{h^2 - 4 \ h \ r - 4 \ r^2}}{2}, \text{ and}$$

$$y = \frac{h+2 \ r \mp \sqrt{h^2 - 4 \ h \ r - 4 \ r^2}}{2}.$$
Substituting for r its value $d \ (1+\sqrt{2}),$

$$x = \frac{h+2 \ d \ (1+\sqrt{2}) \pm \sqrt{h^2 - 4 \ h \ d \ (1+\sqrt{2}) - 4 \ d^2 \ (1+\sqrt{2})^2},}{2},$$

$$y = \frac{h+2 \ d \ (1+\sqrt{2}) \mp \sqrt{h^2 - 4 \ h \ d \ (1+\sqrt{2}) - 4 \ d^2 \ (1+\sqrt{2})^2}.}{2}$$
G. S. H.

Solved also by M. C. S. and D. W. H.

TO FIND THE INVOLUTE OF A CIRCLE GEOMETRICALLY.

A circle is a regular polygon with an infinite number of sides. Now we may readily find the involute of any regular polygon by geometry, and this will conduct us to the involute of the circle.

We will begin with the square. It is evident that the involute consists of three quarter-circumferences, the first having a radius equal to one of the sides of the square, while the radius of the second is twice, and that of the third three times as great. Hence, calling the side of the square x, the length of the curve is $3\pi x$, or $\frac{3}{4}\pi$ times the perimeter of the square.

The corresponding fraction for the triangle is $\frac{2}{3}$; that is, the involute of an equilateral triangle is $\frac{2}{3}$ π times the perimeter.

We find by trial, as we increase the number of sides from 3 to 4, 4 to 5, 5 to 6, &c., that the fractions form the series $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$, $\frac{5}{6}$, $\frac{6}{7}$, &c., and hence we deduce the rule that the length of the involute of a regular polygon is equal to π times the perimeter of the polygon, into a fraction whose denominator is the number of sides, and whose numerator is one less than the number of sides in the evolute.

Let a= the number of sides. The fraction becomes $\frac{a-1}{a}=1-\frac{1}{a}$. In the circle, $a=\infty$, $\frac{1}{a}=0$; and the fraction reduces to unity. Hence the involute of the circle is equal to π times the circumference. G. W. P. Eng. High School.

Solutions of Questions 19 and 23 by G. s. H. are acknowledged.

NOTE. In answer to a correspondent we would say, that our columns are open to the discussion of questions in Natural Philosophy, these discussions being, of course, subject to the discretion of the editors.

ERRAFUM. In question 34, proposed in the last number of the "Teach er," for $\sqrt{x+20}$ read $\sqrt{x+22}$.

INTELLIGENCE.

NATIONAL TEACHERS' ASSOCIATION. — In response to a call issued by the Presidents of the State Teachers' Associations, a goodly number of teachers, from various parts of the United States, assembled in Philadelphia, at the Controllers' Room, on the 26th of August, at ten o'clock, A. M., for the purpose of forming a National Organization.

The meeting was called to order by T. W. VALENTINE, of New York.

JAMES L. ENOS, editor of the "Voice of Iowa," was chosen temporary Chairman and WM. E. SHELDON, of Massachusetts, was appointed Secretary.

Prayer was offered by Rev. Dr. CHALLEN, of Philadelphia.

D. B. HAGAR, of Mass., presented the following resolutions:

Resolved, That in the opinion of the teachers now present, as representatives of various parts of the United States, it is expedient to organize a National Teachers' Association.

Resolved, That a committee of three be appointed by the Chairman to prepare a Constitution adapted to such an association.

Remarks upon the resolutions were made by Messrs. Valentine and Bulkley, of New York; Hickok, State Superintendent of Pennsylvania; Cann, of Georgia; Challen, of Indiana; Taylor, of Delaware; Wickenham, of Pennsylvania; Barrett, of Illinois; Wheelan, of Missouri; and Enos, of Iowa. All of the speakers earnestly favored the resolutions, which were unanimously adopted.

Messrs. Hagar, Challen, and Cann, were appointed to draft a Constitution.

During the afternoon session, interesting statements were made by gentlemen from the several States, respecting the condition of education in their respective localities.

The following Constitution, substantially as prepared by the committee, was discussed with much earnestness, and harmoniously adopted.

PREAMBLE.

To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States, we, whose names are subjoined, agree to adopt the following

CONSTITUTION.

ARTICLE I. Name—This Association shall be styled the "National Teachers' Association."

ART. II. Members.—Any gentleman who is regularly occupied in teaching in a public or private elementary school, common school, high school, academy or scientific school, college or university, or who is regularly employed as a private tutor, as the editor of an educational journal, or as a superintendent of schools, shall be eligible to membership.

Applications for admission to membership shall be made or referred to the Board of Directors, or such committee of their own number as they shall appoint; and all who may be recommended by them, and accepted by a majority vote of the members present, shall be entitled to the privileges of the Association, upon paying two dollars and signing this Constitution.

Upon the recommendation of the Board of Directors, gentlemen may be elected as honorary members by a two-thirds vote of the members present, and as such shall have all the rights of regular members, except those of voting and holding office.

Ladies engaged in teaching may, on the recommendation of the Board of Direc-

tors, become honorary members, and shall thereby possess the right of presenting in the form of written essays (to be read by the Secretary or any other member, whom they may select), their views upon the subject assigned for discussion.

Whenever a member of this Association shall abandon the profession of teaching, or the business of editing an educational journal, or of superintending schools, he shall cease to be a member.

If one member shall be charged by another with immoral or dishonorable conduct, the charge shall be referred to the Board of Directors, or such a committee as they shall appoint, and if the charge shall be sustained by them, and afterwards by two-thirds of the members present at a regular meeting of the Association, the person so charged shall forfeit his membership.

There shall be an annual fee of one dollar. If any one shall omit paying his fee for four years, his connection with the Association shall cease.

A person eligible to membership may become a life member by paying, at once, ten dollars.

ART. III. Officers.—The officers of this Association shall be a President, twelve Vice-Presidents, a Secretary, a Treasurer, and one Counsellor for each state, district or territory represented in the Association. These officers, all of whom shall be elected by ballot, a majority of the votes cast being necessary for a choice, shall constitute the Board of Directors, and shall have power to appoint such committees from their own number as they shall deem expedient.

The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform such other duties, and enjoy such privileges as by custom depolve upon and are enjoyed by a presiding officer. In his absence, the first Vice-President in order who is present, shall preside; and in the absence of all the Vice-Presidents, a pro tempore chairman shall be appointed on nomination, the Secretary putting the question.

The Secretary shall keep a full and just record of the proceedings of the Association and of the Board of Directors; shall notify each member of the Association or Board; shall conduct such correspondence as the directors may assign; and shall have his records present at all meetings of the Association and of the Board of Directors. In his absence a Secretary pro tempore may be appointed.

The Treasurer shall receive and hold in safe keeping all moneys paid to the Association; shall expend the same in accordance with the votes of the directors, or of the Association; and shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which account he shall render to the Board of Directors prior to each regular meeting of the Association; he shall also present an abstract thereof to the Association. The Treasurer shall give such bonds for the faithful discharge of his duties as may be required by the Board of Directors.

The Counsellors shall have equal power with the other directors in performing the duties belonging to the Board.

The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the Association; shall make all necessary arrangements for its meetings; and shall do all in their power to render it a useful and honorable institution.

ART. IV. Meetings.—A meeting shall be held in August, 1858, after which the regular meeting shall be held biennially. The place and the precise time of meeting shall be determined by the Board of Directors.

The Board of Directors shall hold their regular meetings at the place and two hours before the time of the assembling of the Association, and immediately after the adjournment of the same. Special meetings may be held at such other times and places as the Board or the President shall determine.

ART. V.—By-Laws.—By-Laws, not inconsistent with this Constitution, may be adopted by a two-thirds vote of the Association.

ART. VI. Amendments.—This Constitution may be altered or amended at a regular meeting, by the unanimous vote of the members present, or by a two-thirds vote of the members present, providing that the alteration or amendment has been substantially proposed at a previous regular meeting.

The next meeting is to be held in August, 1858, after which meetings will take place biennally, at such times and places as the Directors shall appoint.

In the evening, a very able address upon the national benefits to be derived from a national union of educators, was read (in the necessary absence of its author, Professor William Russell, of Mass.) by Mr. Valentine.

The Association then elected the following Board of Directors:

President. - Z. RICHARDS, of Washington, D. C.

Vice-Presidents.— T. W. Valentine, of New York; D. B. Hagar, of Massachusetts; William Roberts, of Pennsylvania; J. F. Cann, of Georgia; J. L. Enos, of Iowa; T. C. Taylor, of Delaware; J. R. Challen, of Indiana; E. W. Whelan, of Missouri; P. F. Smith, of South Carolina; D. Wilkins, of Illinois; T. Granger, of Indiana; L. Andrews, of Ohio.

Secretary. - H. C. Hickok, of Pennsylvania.

Treasurer. - T. M. Cann, of Delaware.

Counsellors. — Wm. E. Sheldon, of Massachusetts; J. W. Bulkley, of New York; P. A. Cregar, of Pennsylvania; N. R. Lynch, of Delaware; Wm. Morrison, of Maryland; O. C. Knight, of District of Columbia; Wm. S. Bogart, of Georgia; Wm. T. Lucky, of Missouri; A. J. Stevens, of Iowa; Wm. H. Wells, of Illinois; J. Hurley, of Indiana.

After some eloquent remarks by the President, the Association adjourned until August, 1858.

Thus terminated a very interesting and important meeting. The character of the gentlemen present, the hearty enthusiasm which they exhibited, and the cordial harmony which marked their deliberations — all gave the strongest assurance to the friends of Education, that the Association then formed was created to live, and labor, and accomplish great good.

At a meeting of the Board of Directors, held on the 27th of August, it was voted to hold the next meeting of the Association in Cincinnati, on the second Wednesday in August, 1858.

APPOINTMENT BY THE BOARD OF EDUCATION.—At a meeting of the Board in May last, Rev. Mr. Northrop, of Saxonville, was appointed to perform the duties of State Agent, to cooperate with the Secretary in diffusing information and in devising means for improving the educational system throughout the commonwealth. It is the design of the Board to appoint another agent as soon as a suitable person can be found to discharge successfully the duties of the office. It is proposed to employ the services of an experienced teacher, in making the second appointment.

These offices are practically among the most important in the educational department of our State. These agents are to visit, if possible, during the year, all the towns of the commonwealth. They will aim to meet the people, teachers, and pupils, as they shall find it convenient.

With the people they will converse freely and familiarly on the advantages and hindrances of the public school system; will deliver public lectures whenever desired and wherever it may be convenient; they will visit the teachers and pupils in their schools, and there confer with them respecting their duties, their trials, and their success, and will be happy to render such assistance and encouragement, personally, as may be in their power.

In addition to this, wherever it can be done, the teachers of a town will be assembled that they and the agent may consult familiarly respecting any peculiar obstacles, and offer such suggestions as may be adapted to their particular wants. More-

over, as the agents will take note of all improvements in methods of teaching and general management of schools, they will be able to communicate much valuable information, particularly to young and inexperienced teachers.

We would urge teachers to act in cordial concert with these agents in their labors; cooperate with them when they visit a town, and lend all their aid to make their efforts successful in the good cause. No portion of the community will receive greater benefit, than teachers, from these gentlemen, in the discharge of their duties.

TEACHERS' INSTITUTES. - The Secretary of the Board of Education has issued the following circular:

Teachers' Institutes will be held as follows, namely: At Norton, Oct. 5th; at Barnstable, Oct. 12th; at Framingham, Oct. 19th; at Pittsfield, Oct. 26th; at Northampton, Nov. 9th.

Each session will continue five days, including evenings, and the exercises will be conducted and the lectures given by the following gentlemen, viz.: Prof. Wm. Russell, Lowell Mason, (Mus. Dep.,) Prof. Hermann Krusi, Sanborn Tenney, A. M., Rev. A. R. Pope, Rev. B. G. Northrop, and the Secretary of the Board of Education.

With the view of extending the influence of the Institutes, and thus promoting the cause of education, Evening Lectures will be given as follows: At Raynham, October 5th; Taunton and Foxboro', October 6th; Rehoboth, October 7th; Easton, October 8th; Mansfield, October 9th; Falmouth, October 12th; Sandwich, October 13th; Nantucket and Yarmouth, October 14th; Dennis, October 15th; Wareham, October 16th; Southboro', October 19th; Marlboro', October 20th; Sudbury and Wayland, October 21st; Natick, October 22d; Sherburne, October 23d; Lenox, October 26th; Stockbridge, October 27th; Lanesboro', October 28th; Dalton and Hindsdale, October 29th; Williamsburg, Nov. 9th; Sunderland and Whately, Nov. 10th; Hatfield, Nov. 11th; Hadley, Nov. 12th; East Hampton, Nov. 13th.

School Committees, and all the friends of Common Schools, are respectfully and earnestly requested to render such aid as may seem to them proper and just, to facilitate the attendance of the members of the Institute. The exercises of the Institute are also open to the friends of education generally.

B. Hagar, Principal of the West Roxbury High School, was appointed Principal of the State Normal School at Salem, in place of Richard Edwards, resigned. At the same time, Mr. Cornelius Walker, of Boston, was appointed Agent of the Board of Education until the annual meeting in December.

CHARLESTOWN. — A NAME FOR THE NEW GRAMMAR SCHOOL. — At the meeting of the School Committee of this city, held Thursday evening, Sept. 17, the Rev. George E. Ellis offered the following resolution, which was unanimously adopted:

Resolved, That, as a memorial of the American commander in the Battle of Bunker's Hill, and in recognition of the distinguished literary honors which his grandson has added to his name, the School Committee of this city respectfully suggest to the City Council that the school about to be organized in the new school edifice, be called "The Prescott School."

The new school will occupy the house now nearly completed on Medford street, which is a noble structure of brick and iron, constructed in a substantial manner. In the basement, besides a school-room, there are large spaces with arched openings for relaxation in bad weather, when the play-ground around is unavailable. The next two stories are divided each into four large rooms, with side apartments. The upper story furnishes a spacious hall and two square rooms, the windows of which command a fine view of the surrounding country.

MIDDLESEX COUNTY TEACHERS' ASSOCIATION. — The next semiannual meeting of the Middlesex County Teachers' Association will be held in Groton, on Friday and Saturday, the 9th and 10th of October.

Lectures and addresses are expected from the Hon. N. P. Banks, of Waltham; J. B. Morse, Esq., of Charlestown, and Samuel J. Pike, Esq., of Somerville.

The following subjects are proposed for discussion : -

1st. The importance of graded schools, and the studies appropriate to each grade.

2d. Composition, and the best methods of teaching it.

3d. The length of time desirable for a recitation.

Teachers, and all interested, are earnestly invited to attend.

DANIEL MANSFIELD, Pres. Mid. C. T. Asso.

TF REV. ROBERT ALLYN, who has recently resigned the office of Commissioner of Public Schools in Rhode Island, has been elected Professor of Languages in the Ohio University, at Athens, Ohio.

NEW HAMPSHIRE SCHOOL COMMISSIONERS. — The New Hampshire Board of School Commissioners met at Concord in the month of August, and organized by the choice of Dr. Charles F. Elliot, of Great Falls, as President, and Prof. J. W. Patterson, of Hanover, Secretary. The Board consists of Hiram Smart, Rockingham; Dr. Elliot, Strafford; L. H. Perkins, Rev. R. S. Hale, Belknap; Stephen S. Bean, Merrimac; John H. Goodale, Hillsboro'; S. McCollister, Cheshire; Dr. Barton, Sullivan; Prof. Patterson, Grafton; and Rev. G. H. Pinkham, Coos.

RESIGNED. — Mr. WM.W. MITCHELL, Principal of the Northampton High School, has resigned his charge, and retires to enjoy, for a time, cum otio et dignitate, the quiet pursuits of husbandry, in Cummington, his native mountain town. For many years he had charge of the Chicopee High School, which he left for that at Northampton. He has been a faithful laborer, an earnest friend in the cause, and deserves kind remembrance from his co-laborers and the friends of education. After a suitable rest, we trust, he will return to his old vocation with renewed zeal, vigor and increased usefulness.

IF Mr. Hanson L. Read, formerly a highly successful teacher, and Associate Principal in Leicester Academy, has been appointed Master of the High School, Milford, Mass.

Mr. J. W. SPAULDING, recently of Myricksville Academy, has assumed charge of the venerable academy at Atkinson, N. H.

The new Freshman class at Williams College already numbers fifty-four members. Several additions have already been made to the other classes. It is proposed to have the new Alumni Hall erected and prepared by next Commencement. The public debate of the Literary Societies will occur Oct. 21.

Of the seventy-seven applicants for admission to Amherst College, at the opening of the new year, sixty-eight have become members of the Institution; sixty-four constitute the Freshman class; three entered the Sophomore, and one the Junior class. The average age of the Freshman class is twenty years lacking two months.

13 THE ATLANTIC MONTHLY is the name of a new periodical about to be published by Phillips, Sampson & Co. The first number will be issued the first of November. The list of contributors embraces the names of many of the most prominent writers of the day.

IMPORTANT DECREE.—The Russian Government has issued a most important decree with reference to a future commercial intercourse between the United States and the people of Siberia. It is ordered that the teaching of the German language be discontinued in the public schools of Irkoutsk, and superseded by the English, or, as it is officially called, "La langue Americaine," as the people on the banks of the Amoor river will have a more profitable trade with the United States than with Germany in a short time.

REVIEWERS' TABLE.

PRINCIPLES OF PERSPECTIVE, practically and geometrically developed, with particular reference to Drawing from Nature. By Hermann Krüsi, formerly of the Home and Colonial Schools in London, now Lecturer at the Massachusetts Institutes. New York: Mason Brothers, 1857.

This work is divided into four parts, which severally treat of "Practical Perspective," "Geometrical Perspective," "Water Reflections," and "Shades and Shadows."

The arrangement is natural and systematic, and the style easy and agreeable; in the statement of principles the author is clear and direct; he deals in no abstractions, but gives the results of extended research and a large experience.

In typographical neatness and mechanical finish the work is such as to be highly creditable to the enterprising publishers who have issued it. We regard it as one of the best (if not the best) manuals of the kind yet published.

B.

JEWETT'S SPIERS'S FRENCH AND ENGLISH DICTIONARIES.—The larger of these Dictionaries is an octavo volume of 1008 pages, the smaller is in quarto form, and contains 716 pages. Both of them, in addition to many words not found in other Dictionaries, contain compound terms, in French and English, which are not translated literally, vocabularies of mythological and geographical names, and also such names of persons as differ in the two languages. Two features render these works peculiarily adapted to the use of young students: the pronunciation of each French word is given in an intelligible manner, and the irregular tenses and persons of all the French verbs are found in their alphabetic place in the Dictionary. For school-room purposes, the smaller Dictionary is just what is demanded, having a convenient size, a beautiful and clear type, and a sufficiently comprehensive vocabulary. Its superior in any respect we have not seen. Teachers will do well to obtain both of these works, as they can at a very small cost.

H.

New Editions of Webster's Dictionables. — No better recommendation can be given of these Dictionaries than is contained in the following letter from Prof. Russell:

LANCASTER, MASS., 11th May, 1858. GENTLEMEN: - At the request of several classes of teachers, I have had occasion to examine closely the recent editions of Dr. WEBSTER'S DICTIONARIES, with reference to points of detail which are involved in the daily processes of instruction in the school-room. It has given me great pleasure to observe that in these particulars, the critical labors of revision, conducted by Professor Goodrich and by Mr. William G. Webster, have left so little room for the scrupulous objections of some instructors to certain forms of orthoepy and orthography presented in the earlier editions of the Dictionary. As an important feature in these improved issues of the work, it gives me pleasure to recognize the judicious reference of questions in pronunciation to the authority of Mr. B. H. Smart, followed in my own lessons in Enunciation. Another valuable improvement adopted in the Counting-House and Family, and in the Academic and High School editions is, I think, the restriction of Dr. Webster's standard of orthography to the classes of words referred to in the preface to these editions. The great care taken to secure perfect accuracy in the definitions introduced in the improved forms of the Dictionary, and the valuable addition of Synonyms exactly discriminated, render these editions a truly efficient aid to the advancement of general education.

Yours respectfully,

WILLIAM RUSSELL.